### § 250.1626 Tubing and wellhead equipment.

- (a) No tubing string shall be placed into service or continue to be used unless such tubing string has the necessary strength and pressure integrity and is otherwise suitable for its intended use.
- (b) Wellhead, tree, and related equipment shall be designed, installed, tested, used, and maintained so as to achieve and maintain pressure control.

#### §250.1627 Production requirements.

- (a) The lessee shall conduct sulphur production operations in compliance with the approved Development and Production Plan requirements of \$\$\\$250.1627\$ through 250.1634 of this subpart and requirements of this part, as appropriate.
- (b) Production safety equipment shall be designed, installed, used, maintained, and tested in a manner to assure the safety of operations and protection of the human, marine, and coastal environments.

[56 FR 32100, July 15, 1991. Redesignated and amended at 63 FR 29479, 29487, May 29, 1998; 63 FR 34597, June 25, 1998]

# § 250.1628 Design, installation, and operation of production systems.

- (a) General. All production facilities shall be designed, installed, and maintained in a manner that provides for efficiency and safety of operations and protection of the environment.
- (b) Approval of design and installation features for sulphur production facilities. Prior to installation, the lessee shall submit a sulphur production system application, in duplicate, to the District Manager for approval. The application shall include information relative to the proposed design and installation features. Information concerning approved design and installation features shall be maintained by the lessee at the lessee's offshore field office nearest the OCS facility or at another location conveniently available to the District Manager. All approvals are subject to field verification. The application shall include the following:
- (1) A schematic flow diagram showing size, capacity, design, working pressure of separators, storage tanks,

- compressor pumps, metering devices, and other sulphur-handling vessels;
- (2) A schematic piping diagram showing the size and maximum allowable working pressures as determined in accordance with API RP 14E, Recommended Practice for Design and Installation of Offshore Production Platform Piping Systems;
- (3) Electrical system information including a plan of each platform deck, outlining all hazardous areas classified according to API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Division 2, or API RP 505, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2 (incorporated by reference as specified in §250.198), and outlining areas in which potential ignition sources are to be installed;
- (4) Certification that the design for the mechanical and electrical systems to be installed were approved by registered professional engineers. After these systems are installed, the lessee shall submit a statement to the District Manager certifying that the new installations conform to the approved designs of this subpart.
- (c) Hydrocarbon handling vessels associated with fuel gas system. You must protect hydrocarbon handling vessels associated with the fuel gas system with a basic and ancillary surface safety system. This system must be designed, analyzed, installed, tested, and maintained in operating condition in accordance with API RP 14C, Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms (incorporated by reference as specified in §250.198). If processing components are to be utilized, other than those for which Safety Analysis Checklists are included in API RP 14C, you must use the analysis technique and documentation specified therein to determine the effect and requirements of these components upon the safety system.
- (d) Approval of safety-systems design and installation features for fuel gas system. Prior to installation, the lessee shall submit a fuel gas safety system

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application, in duplicate, to the District Manager for approval. The application shall include information relative to the proposed design and installation features. Information concerning approved design and installation features shall be maintained by the lessee at the lessee's offshore field office nearest the OCS facility or at another location conveniently available to the District Manager. All approvals are subject to field verification. The application shall include the following:

- (1) A schematic flow diagram showing size, capacity, design, working pressure of separators, storage tanks, compressor pumps, metering devices, and other hydrocarbon-handling vessels:
- (2) A schematic flow diagram (API RP 14C, Figure E1, incorporated by reference as specified in §250.198) and the related Safety Analysis Function Evaluation chart (API RP 14C, subsection 4.3c, incorporated by reference as specified in §250.198).
- (3) A schematic piping diagram showing the size and maximum allowable working pressures as determined in accordance with API RP 14E, Design and Installation of Offshore Production Platform Piping Systems;
- (4) Electrical system information including the following:
- (i) A plan of each platform deck, outlining all hazardous areas classified according to API RP 500, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Division 1 and Divisions 2, or API RP 505, Recommended Practice for Classification of Locations for Electrical Installations at Petroleum Facilities Classified as Class I, Zone 0, Zone 1, and Zone 2 (incorporated by reference as specified in §250.198), and outlining areas in which potential ignition sources are to be installed;
- (ii) All significant hydrocarbon sources and a description of the type of decking, ceiling, walls (e.g., grating or solid), and firewalls; and
- (iii) Elementary electrical schematic of any platform safety shutdown system with a functional legend.
- (5) Certification that the design for the mechanical and electrical systems to be installed was approved by reg-

istered professional engineers. After these systems are installed, the lessee shall submit a statement to the District Manager certifying that the new installations conform to the approved designs of this subpart; and

- (6) Design and schematics of the installation and maintenance of all fireand gas-detection systems including the following:
- (i) Type, location, and number of detection heads:
- (ii) Type and kind of alarm, including emergency equipment to be activated;
  - (iii) Method used for detection;
- (iv) Method and frequency of calibration; and
- (v) A functional block diagram of the detection system, including the electric power supply.

[53 FR 10690, Apr. 1, 1988, as amended at 61 FR 60026, Nov. 26, 1996. Redesignated at 63 FR 29479, May 29, 1998, as amended at 65 FR 219, Jan. 4, 2000; 67 FR 51760, Aug. 9, 2002; 75 FR 22227, Apr. 28, 2010]

## § 250.1629 Additional production and fuel gas system requirements.

- (a) *General*. Lessees shall comply with the following production safety system requirements (some of which are in addition to those contained in §250.1628 of this part).
- (b) Design, installation, and operation of additional production systems, including fuel gas handling safety systems. (1) Pressure and fired vessels must be designed, fabricated, and code stamped in accordance with the applicable provisions of sections I, IV, and VIII of the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code (incorporated by reference as specified in 30 CFR 250.198). Pressure and fired vessels must have maintenance inspection, rating, repair, and alteration performed in accordance with the applicable provisions of API Pressure Vessel Inspections Code: In-Service Inspection, Rating, Repair, and Alteration, API 510 (except Sections 5.8 and 9.5) (incorporated by reference as specified in §250.198).
- (i) Pressure safety relief valves shall be designed, installed, and maintained in accordance with applicable provisions of sections I, IV, and VIII of the ANSI/ASME Boiler and Pressure Vessel Code (incorporated by reference as